CLAIMS

1. A method for integrated communications in a telecommunications network, which combines a Mobile Telecommunications Network (PLMN) and at least an other, wired packet switching or circuit switched network (PSTN/ISDN, INTERNET), with a subscriber's Mobile Station (MS) designed to operate in the Mobile Telecommunications Network (PLMN) and a second communication terminal (IP-T; IP-MS, SC-T) of the subscriber designed to operate in the other or one of the other networks (PSTN/ISDN, INTERNET) and with an extended Mobile Services Switching Center (MSCX) that over a gateway (IP-GW) connects to the packet switching network (INTERNET), **characterised in** that, when the Mobile Station (MS) is detached from the Mobile Telecommunications Network (PLMN), the second communication terminal (IP-T; IP-MS, SC-T) is registered at the Mobile Telecommunications Network (PLMN) in such a way that a request for routing information for the setup of a connection to the subscriber's Mobile Station (MS), sent to the related Home Location Register (HLR) will be answered with the address of the extended Mobile Services Switching Center (MSCX) to which the second communication terminal (IP-T; IP-MS, SC-T) is attached.

2. Method according to claim 1, wherein a local control module (IP-CL) is used in order to forward a registration request over the packet switching network (INTERNET) to the extended Mobile Services Switching Center (MSCX) which uses a centralised control module (TCM) in order to process the received request and to attach or detach the second communication terminal (IP-T; IP-MS, SC-T).

3. Method according to claim 1 or 2, wherein the centralised control module (TCM) updates the record related to the subscriber's Mobile Station (MS), which is stored in the

Home Location Register (HLR), whenever the second communication terminal (IP-T; IP-MS, SC-T) is attached to or detached from Mobile Telecommunications Network (PLMN).

4. Method according to claim 1, 2 or 3, wherein data, required to establish connections for incoming and/or outgoing calls between the extended Mobile Services Switching Center (MSCX) and the second communication terminal (IP-T; IP-MS, SC-T), are stored in a local database (VLRX), preferably in the Visitor Location Register (VLR) assigned to the extended Mobile Services Switching Center (MSCX).

5. Method according to one of the claims 1 to 4, wherein, for incoming and/or outgoing calls, connections to the second communication terminal (IP-T; IP-MS, SC-T) are established over a packet switching or a circuit switched network (Internet, PSTN/ISDN).

6. Method according to one of the claims 1 to 5, wherein all charges resulting from incoming and/or outgoing calls of the second communication terminal (IP-T; IP-MS, SC-T) are billed to the account related to the subscriber's Mobile Station (MS).

7. Method according to one of the claims 1 to 6, wherein the Mobile Station (MS) and the second communication terminal (IP-T; IP-MS, SC-T) are integrated in a single communication terminal (U-MS).

8. Method according to one of the claims 1 to 7, wherein the subscriber's Mobile Station MS is switched off in order to get detached from the Mobile Telecommunications Network (PLMN) or wherein the Mobile Station (MS) and the second communication terminal (IP-T; IP-MS, SC-T) are attached to and detached from the Mobile Telecommunications Network PLMN) by means of the local control module (IP-CL).

9. Method according to one of the claims 1 to 8, wherein the local control module (IP-CL) automatically performs the handover between the Mobile Station (MS) and the second communication terminal (IP-T; IP-MS, SC-T), whenever the preferred unit can directly or indirectly be attached to the Mobile Telecommunications Network (PLMN).

10. Method according to one of the claims 1 to 9, wherein the Mobile Station (MS) and the second communication terminal (IP-T; IP-MS, SC-T) share the same identity and address number (IMSI, MSISDN).

11. Mobile Services Switching Center (MSCX) operating according to a method as defined in one of the claims 1 to 10.

12. Mobile Services Switching Center (MSCX) according to claim 11, comprising an IP-Interface (IP-IF) with a gateway (IP-GW), a centralised control module (TCM) and a database (VLRX) designed to store data required to establish a connection to the second communication terminal (IP-T; IP-MS, SC-T).

13. Mobile Services Switching Center (MSCX) according to claim 11 or 12, comprising a control unit designed to set up a connection to the second communication terminal (SC-T) that operates in the switched network (PSTN/ISDN).

14. Integrated communication terminal (U-MS) operating according to a method as defined in one of the claims 1 to 10, comprising modules (MS, IP-MS), which correspond to the Mobile Station (MS) and to the second communications terminal (IP-MS).

15. Integrated communication terminal (U-MS) operating according to claim 14 with an application (IP-CL) that is designed to perform handovers between said modules (MS, IP-MS) automatically.

16. Telecommunications network comprising a Mobile Services Switching Center (MSCX) as defined in claim 11, 12 or 13.